FOX RIVER CURRENT

May/June 2004 Vol. 7, No. 3 Update from the Lower Fox River Intergovernmental Partnership

Little Lake Butte des Morts Cleanup Begins

By Susan Pastor, U.S. Environmental Protection Agency

Residents near Little Lake Butte des Morts should be noticing some changes in the area this summer as cleanup begins.

U.S. Environmental Protection Agency and Wisconsin Department of Natural Resources staff are overseeing a variety of activities that started in June. At press time, WTM I Co. and Glatfelter, the companies paying for the $66 million cleanup, were building their staging area east of north Lake Street and south of the state Route 10/441 bridge. The staging area will consist of a water treatment building, a boat dock and a place to store "geotubes." These large, heavy plastic tubes will be used to separate water from the sediment that will be removed from the lake bottom. More sampling of the lake has already been done to find the exact location of contaminated sediment to be dredged this fall.

PHOTO COURTESY OF MIRATECH

Geotubes like these will be used to separate the sediment from the water.

According to EPA Remedial Project Manger Jim Hahnenberg, everyone has been eager to get started. "Although EPA and DNR are excited to see the cleanup finally get going, WTM I Co. and Glatfelter have been very cooperative and enthusiastic in getting this project off the ground," he said. "This is another example of being able to get things done when everyone is motivated to work together."

When the staging area is in place, workers will begin installing a floating pipeline to the first location to be dredged at the south end of the lake just offshore of Arrowhead Park. This pipeline will move the dredged water and sediment mixture known as slurry from the dredging area to the staging area. Dredging is scheduled to start in September to remove PCB-contaminated sediment. A hydraulic cutterhead-type dredge will be used because it will remove sediment neatly and efficiently.

After the sediment is removed from the lake's bottom, it will be pumped into the geotubes. They will be lying on a lined, gravel area where water will be able to drain from the sediment. This water will be treated (cleaned) on site and pumped back into the lake. After the sediment is dry, it will eventually be taken away in covered trucks with plastic liners for proper disposal.

In November, sand will be placed on the river bottom to see if this can be done without stirring it up. To do this, sand will be put in a small, non-contaminated area on the east side of the lake about one-half mile north of state Route 441. This test will tell engineers if the sediment will remain stable here and in other sections of the river. It will also indicate if this can be done after dredging if capping were to be used.

It is expected that cleanup work will end for the year in December and resume, weather permitting, in spring 2005.

Trustee Council Selects Restoration Projects

By Greg Swanson, Wisconsin Department of Natural Resources

The Fox River/Green Bay Natural Resource Trustee Council approved 16 local restoration projects for this year and next year at a public meeting on Tuesday, May 11 at the University of Wisconsin-Green Bay campus.

Funding for these natural resource damage assessment projects comes from the 2001 $20 million Appleton Papers, Inc./NCR Corp. interim settlement, the 2004 $3 million Glatfelter/WTM I Co. interim settlement, the 2004 $1.5 million Fort James/Georgia-Pacific Habitat and Water Quality Enhancement Fund, and the 2004 $1.3 million Fort James/Georgia-Pacific Property Acquisition Fund.

"The Oneida Tribe has been honored to host the first two trustee council meetings and the tribe is pleased with the progress the council has made," said Paul Ninham, business committee council member, Oneida Tribe of Indians of Wisconsin. "In many ways, this council is dealing with a unique situation because the responsible parties have been providing funds before a final settlement has been reached."

Some projects approved for 2004 include allocating:

- $50,000 for the construction of walleye rearing ponds on state lands in Door County.
- $6,000 in matching funds to the Green Bay Area Great Lakes Sport Fishing Club bluegill stocking program for Green Bay near the mouth of the Suamico River. The club will match the NRDA funds with $6,000 from its own funds and money from the Brown County Conservation Alliance.
- $3 million for the renovation of the Wild Rose Fish Hatchery to assist in the raising of predator fish for stocking in Green Bay. A total of $6 million in NRDA funds will be committed in 2004 and 2005 to match $7.7 million in state of Wisconsin funds supported by the Great Lakes Salmon and Trout Stamp, federal aid in Sport Fish Restoration and revenues for the sales of fishing licenses.
- $145,000 for three projects within the Terrell's Island habitat restoration area on western Lake Butte des Morts. A one-tenth-acre island will be constructed and an existing island will have its habitat restored to attract nesting common terns. A half-acre island will also be constructed to attract nesting waterfowl and migrating shorebirds. Maintenance of the islands will be completed by the Butte des Morts Conservation Club.
- $420,000 for the restoration of about 3,000 acres in the Rush Lake wetland complex in northeast Wisconsin. This project includes $50,000 in matching funds from Ducks Unlimited.
- $25,000 for the Oconto Marsh pump and water control project. The 220-acre freshwater marsh, on the west shore of Green Bay, needs a new pump and water control structure so the entire marsh can be used by waterfowl, Forster's terns and other birds for nesting and feeding habitat.

Funding recommendations approved for 2005 include:

- $3 million in continuation funds for the Wild Rose Hatchery renovation.
- $1.5 million for land acquisition and conservation easements to protect about 1,075 acres that includes approximately eight miles of shoreline along northern Green Bay. Matching funds from The Nature Conservancy and other sources will be added to the total.

The natural resource trustees are comprised of Wisconsin Department of Natural Resources, U.S. Fish and Wildlife Service, Oneida, Menominee Indian Tribe of Wisconsin, Michigan Attorney General, Michigan Department of Environmental Quality, and National Oceanic and Atmospheric Administration.

For a list of all projects, contact Trustee Council Coordinator Colette Charbonneau, FWS, at Colette_Charbonneau@fws.gov or at (920) 866-1726.

New Fish Advisory Signs Coming Soon

By James Morrison, Wisconsin Department of Health and Family Services

Improved signage and outreach efforts to non-English speaking populations were among the primary goals identified this spring when the Wisconsin Department of Health and Family Services met with local health authorities to plan this year's Lower Fox River fish advisory communication campaign.

To help achieve these goals, a sign displaying pictures of several types of fish, was designed to give information

See **Signs**, *Page 3*

The Fox River Current will continue to feature updates on cleanup and restoration activities that are planned or ongoing.

Technical Update . . .

Design Work Begins for Remaining Phases

By Greg Swanson, Wisconsin Department of Natural Resources

Remaining three sections of the river and Green Bay

- A legal agreement was signed in March among DNR, EPA, Georgia-Pacific, and NCR Corp. to design the cleanup for the remaining sections of the Lower Fox River and Green Bay, also known as Operable Units 2-5.
- The community involvement plan for the project is being revised to focus on information distribution during the design and cleanup.

Little Lake Butte des Morts

- Work continues on the selection of the on-shore staging for dewatering the dredged sediment and treatment of the water to be returned to the river. Dredging at Little Lake Butte des Morts, also known as OU 1, is expected to start in September.
- The companies doing the cleanup, Glatfelter and WTM I Co., are keeping local residents informed about this portion of cleanup. They have visited or left printed information at each west shore Little Lake Butte des Morts residence regarding the activities that will be seen on the lake later this summer.
- EPA has added about 5,000 addresses near Little Lake Butte des Morts to its mailing list. EPA and DNR want to keep more residents informed about the cleanup progress of OU1.

Natural Resource Damage Assessment

- The June 2002 NRDA agreement with Georgia-Pacific was approved in federal court on March 19. This agreement provides for the acquisition of 1,063 acres of ecologically significant threatened habitat on the west shore of Green Bay. The agreement also provides for several specific habitat restoration projects and 11 recreational projects in seven Brown County municipalities.

See **Technical Update**, *Page 6*

Signs *from Page 2*

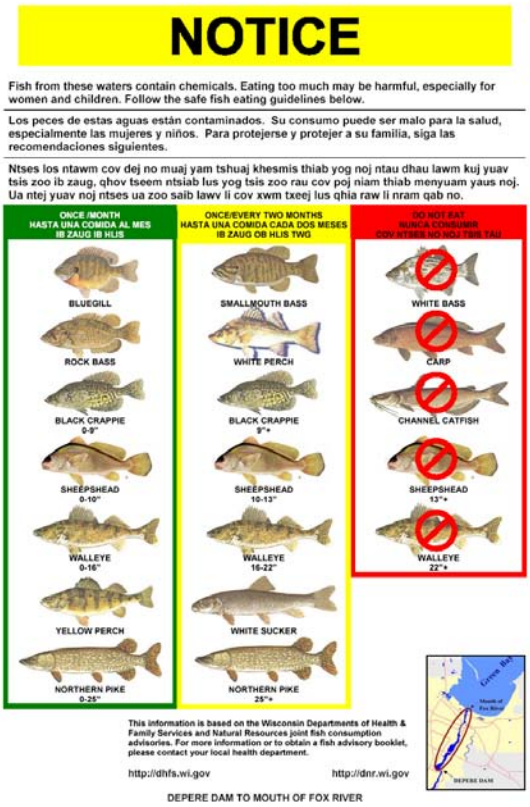
specific to each of the five affected segments of the Lower Fox River from Little Lake Butte des Morts to the mouth at Green Bay. They will be posted by local health departments this summer at popular boat landings and shoreline fishing locations.

"Local health officials have expressed concern that the PCB message was not getting out to people fishing along the Lower Fox River," said Jeff Phillips, Outagamie County environmental health sanitarian. "Of special concern were the large numbers of Hmong and Spanish-speaking people observed fishing along these stretches. Hopefully, the new signs with color images and multiple languages will be easier to understand, and will cause people along the river to take notice of the advisories."

The content of the advisory information can be complex considering it covers mercury and PCBs, different fish species and different water bodies. DHFS is working on ways to pare it down into simpler terms. The new signs are a first step in that process.

DHFS has worked closely with the Wisconsin Department of Natural Resources to assure consistency with the existing

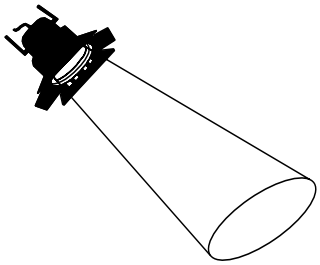
See **Signs,** *Page 7*



Signs picturing different types of fish and written in several languages will soon be posted.

The Fox River Current is featuring promising natural resource damage assessment projects in and near the Lower Fox River.

Spotlight On:



Great Lakes Spotted Musky Reintroduction Program

By Colette Charbonneau, U.S. Fish and Wildlife Service

There is something amiss in the waters of Green Bay and its tributaries besides PCB contamination. The fish community is unbalanced as evidenced by a low abundance and diversity of top predators and their prey in combination with the presence of exotic species. Top fish predators are an important part of a fish community that keeps the underwater world in balance.

DNR Fisheries Technician Rod Lange holds a large spotted musky.

The Fox River/Green Bay Natural Resource Trustee Council has financially supported the Wisconsin Department of Natural Resources Great Lakes spotted musky reintroduction program to help bring back these large native top predators into the Green Bay watershed.

"The DNR was having success with its limited stocking program in 2002 and the support of the trustee council provided for a major expansion of the stocking program in 2003," stated George Boronow, DNR's Lower Fox River and Upper Green Bay Basins supervisor. "The department was able to more than double its production of these important fish."

In spring 2003, spotted musky eggs were collected and fertilized from wild donor populations in Lake St. Clair, Mich., Lake Huron and the St. Lawrence River. The fertilized eggs were transported to the Wild Rose Fish Hatchery where the eggs hatched and the young musky were raised to a "finger-size" for stocking. The major cost of raising the young fish to an appropriate size goes toward food.

"It was an extremely successful year with the production of approximately 40,000 small spotted musky which was 10,000 fish over our goal," boasted Steve Fajfer, DNR natural resources operations supervisor, Wild Rose/Westfield subteam.

The young spotted musky were released last fall into the Lower Fox River, Little Lake Butte des Morts, Peshtigo River, Menominee River, near Sturgeon Bay and Little Sturgeon Bay, and in Lake Winnebago. As these predators grow, they will become loners. They will lurk in the aquatic weeds, dart out, capture their prey and begin to balance the community of fish in the waters of Green Bay.

The natural resource trustees are comprised of DNR, U.S. Fish and Wildlife Service, Oneida Tribe of Indians of Wisconsin, Menominee Indian Tribe of Wisconsin, Michigan Attorney General, Michigan Department of Environmental Quality, and National Oceanic and Atmospheric Administration.

For further information on NRDA projects, contact Trustee Council Coordinator Colette Charbonneau, FWS, at Colette_Charbonneau@fws.gov or at (920) 866-1726.

Landfill, Vitrification – Both Have Pros, Cons

By Susan Pastor, U.S. Environmental Protection Agency

To landfill or not to landfill. To vitrify or not to vitrify.

U.S. Environmental Protection Agency and Wisconsin Department of Natural Resources have been struggling with these issues for several months. While they are going with landfilling at Little Lake Butte des Morts for now, representatives from both agencies have taken a closer look at vitrification. Theoretically, this relatively new technology would involve burning PCB-contaminated sediment dredged from the lake at a very high heat. The remaining glassy-like material could then be incorporated into road construction projects as well as in the making of concrete mixtures and shingles.

Jim Hahnenberg, EPA remedial project manager, said using vitrification here is not as easy as it sounds. "While vitrification in many ways is an attractive option, we have never used it for a full-scale sediment project," he stated. "Uncertainties associated with scaling up the technology would present a lot of challenges and unknowns for us."

In studying whether vitrification is right for Little Lake Butte des Morts, also referred to as Operable Unit 1, Hahnenberg and his DNR counterparts have had to weigh the pros and cons:

Landfilling

Pros–

- Landfills that are permitted to accept PCB-contaminated sediment already exist in Wisconsin. There are existing facilities relatively close to the Lower Fox River.
- It is a safe, conventional, proven technology that has been done at numerous locations in the state. It can be used now to dispose of Little Lake Butte des Morts sediment.
- It is the lowest cost disposal option.
- PCBs will be permanently removed from the river environment, eliminating exposure to fish, as well as people and other wildlife.

The landfill near the town of Chilton, which is where the lake sediment will be taken, has natural clay underneath that is 20 and 45 feet thick. This is in addition to a synthetic liner and an engineered four foot clay layer. Additionally, this facility has a natural ground-water slope toward the landfill. This means that ground water would flow toward the landfill even in the unlikely event that PCBs would somehow escape the liners/clay layers. These features provide a high level of protection from any effects to local drinking water supplies.

Cons–

- Moves an environmental problem someplace else.
- PCBs are not destroyed.
- Landfills have to be operated and maintained forever.
- Landfills could leak if not maintained or monitored properly.

Vitrification

Pros–

- Sediment can be processed for safe reuse for the construction industry.
- Landfill capacity would not be affected.
- A new use of this existing technology would advance our knowledge and abilities of beneficially reusing contaminated sediment.

Cons–

- There are no vitrification facilities in Wisconsin that can handle sediment. The existing Neenah plant was designed to burn only paper sludge. Burning sediment involves using oxygen in the process. The existing facility uses air to burn paper sludge. This is because the paper sludge itself contributes fuel to the process.
- It could take up to three years to obtain local and state permits, design, and build a new, full-scale facility.
- Based on rough estimates, nearly $30 million would be added to the original cost of the Little Lake Butte des Morts cleanup.
- A location for a new vitrification plant would have to be found. This may be undesirable for the host community.

"I agree that vitrification is a good technology, but we have so many unanswered questions like who will pay for it," said Hahnenberg. "I know a lot of people don't care about the cost or how long it will take to switch disposal methods, but the government agencies have to care."

As the cleanup goes on, EPA and DNR will continue to consider vitrification for other parts of the Lower Fox River.

Profile On ... Greg Swanson

DNR Communicator Takes Pride in Fox Valley Roots

By Susan Pastor, U.S. Environmental Protection Agency

When Wisconsin Department of Natural Resources Senior Public Affairs Manager Greg Swanson travels to the Fox Valley for a public meeting or press announcement, he always expects a long-lost relative to show up.

Although he resides in the Madison area, Swanson, 58, boasts of his deep and long-standing ties to Green Bay and the Fox Valley. "My mother's family was among the first to settle in New Franken," he explained. "Actually, my mother was born there. Based on the number of people attending the last couple of family reunions I've gone to in Green Bay, I have hundreds of relatives living in Green Bay and the surrounding area."

Since working on community involvement and public information for the Lower Fox River cleanup and restoration over the past five years, he has formulated his own personal opinions related to the project.

"I think that cleaning up the Fox is probably the best and most important thing that can happen," he added. "I remember all too vividly how incredibly polluted the Fox River was when I was a kid 50 years ago. While we've come a long way since then, we need to make the big push to get the PCBs and other contaminants out of the river so that it can be the centerpiece of the Fox Valley."

Swanson has had a varied career on the way to his current position with the DNR. Prior to joining the DNR in 1999, he was the district communication manager for five years for the Wisconsin Department of Transportation's District 4 office in Wisconsin Rapids. From 1979 to 1993, he lived in Duluth, Minn. where he taught communications at the University of Minnesota. Prior to that, he owned and operated a temporary employment service office for six years. He also taught communications in Nebraska and worked in radio, television and industrial communications. Swanson has a bachelor's and master's degree in communications from Southern Illinois University, Carbondale. He also has done additional graduate work at the University of Nebraska and the University of Minnesota.

Greg Swanson

Today, Swanson lives in rural Sun Prairie with his wife of 33 years and a 10-year-old foster son. He also has an adult daughter and two grandchildren who live in the Twin Cities area. For recreation, he plays golf, works around the house — he says the "honey-do" list never shrinks — and brews his own beer. He concluded, "I also love to fish for musky and walleye, but I just don't get as much time on the water as I did when I lived up north."

Technical Update *from Page 3*

- A 63-acre property in the village of Howard has been acquired with NRDA funds as part of the Green Bay West Shores Wildlife Area. The property includes about 35 acres of lowland woods, 10 acres of upland woods, and 12 acres of wetlands. There are also 1,300 feet of frontage on Duck Creek and about 6 acres of the property is part of the Duck Creek Slough.
- An 85-acre property in Marinette County has been acquired with NRDA funds for the Statewide Habitat Areas. The property is primarily wetland and includes over 1,000 feet of frontage on Green Bay and about 1,500 feet of frontage on streams flowing into the bay.

Out and About...

By Susan Pastor, U.S. Environmental Protection Agency

The Fox River Intergovernmental Partnership is made up of U.S. Environmental Protection Agency, Wisconsin Department of Natural Resources, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Oneida Tribe of Indians of Wisconsin and Menominee Indian Tribe of Wisconsin. These partners, as well as other supporting agencies, regularly provide speakers to organizations in the Fox Valley area. The following people recently made presentations:

April

- *Chuck Warzecha* and *Liz Evans*, Wisconsin Department of Health and Family Services: Literacy Council of Brown County English as a Second Language classes, Green Bay; Lower Fox River and Green Bay fish consumption advisories and proper fish cleaning.

May

- *Bruce Baker*, DNR: University of Wisconsin Great Waters Institute for Journalism and Natural Resources, Green Bay; general Lower Fox River cleanup.
- *Colette Charbonneau*, FWS and *Tom Nelson*, Oneida: "It's Your Environment" television show, Oshkosh; Lower Fox River/ Green Bay restoration.

Check out these Web sites:

http://dnr.wi.gov/org/water/wm/lowerfox/ New!

http://www.epa.gov/region5/sites/foxriver/

http://www.fws.gov/r9dec/nrdar/nrdamain.html

http://www.fws.gov/r3pao/nrda/

Signs *from Page 3*

advisories. To aid in conveying information among different populations, sign text is in Spanish and Hmong. It is anticipated that the images on the signs will draw attention to the important information, and also help with fish identification. For those new to Wisconsin, the signs are especially important because they highlight those fish that should not be eaten at all. Links to DHFS and DNR Web sites are also included on the signs for those who have access to the Internet.

DHFS staff will continue to get the word out by meeting with local food retailers, addressing English as a Second Language classes, and preparing coloring books and special curriculum for use in schools. Another angler survey is also planned to document local fishing habits.

If you know of a location where a sign should be posted or would like to have a speaker address a class or organization, contact your local health department or DHFS Health Educator Jim Morrison, at morrijm1@dhfs.state.wi.us or at (608) 267-3227.

Information Available at Local Libraries

The Intergovernmental Partners invite the public to review technical reports, fact sheets and other documents related to the Lower Fox River cleanup at information repositories set up in the reference sections of the following local libraries. Information repositories at the public libraries in DePere, Kaukauna, Little Chute, Neenah and Wrightstown have been discontinued. However, binders containing fact sheets will be mailed to and maintained at these locations as well as at the repositories listed below.

- **Appleton Public Library**, 225 N. Oneida St., Appleton, Wis.; (920) 832-6170
- **Brown County Library**, 515 Pine St., Green Bay, Wis.; (920) 448-4381, Ext. 394
- **Door County Library**, 107 S. Fourth Ave., Sturgeon Bay, Wis.; (920) 743-6578
- **Oneida Community Library**, 201 Elm St., Oneida, Wis.; (920) 869-2210
- **Oshkosh Public Library**, 106 Washington Ave., Oshkosh, Wis.; (920) 236-5200

An administrative record, which contains detailed information upon which the selection of the final site cleanup plan was based, is also available for review at two DNR offices: 801 E. Walnut St., Green Bay, Wis. and 101 S. Webster St., 2nd Floor, Madison, Wis. An administrative record is also available at the EPA Record Center, 77 W. Jackson Blvd., 7th Floor, Chicago, Ill.

Prepared by the Fox River Intergovernmental Partnership: Wisconsin Department of Natural Resources, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Menominee Indian Tribe of Wisconsin, Oneida Tribe of Indians of Wisconsin, and National Oceanic and Atmospheric Administration. Supporting agencies include Wisconsin Department of Health and Family Services, U.S. Agency for Toxic Substances and Disease Registry, and U.S. Army Corps of Engineers.

Disclaimer: The opinions expressed in these articles are solely those of the authors and are not necessarily shared by all members of the Fox River Intergovernmental Partnership.

INSIDE FOX RIVER *CURRENT*

Fox River Current is published bimonthly by the Fox River Intergovernmental Partnership. Its purpose is to provide up-to-date information about cleanup and restoration efforts on the Lower Fox River. Call Greg Swanson at (608) 264-6024 to request a subscription or alternative format. Feedback on articles and ideas for future issues are welcome. Send comments to Greg Swanson, *Fox River Current*, DNR, CE/8, P.O. Box 7921, Madison, WI 53707 or e-mail <gregory.swanson@dnr.state.wi.us>

Office of Public Affairs (P-19J)
United States Environmental Protection Agency
Region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590